

ABSTRACTMagnetrons

A magnetron has an output comprising a coaxial line 15 which transmits energy from a wanted oscillator mode as a first coaxial waveguide mode and energy from an unwanted oscillator mode as a second cylindrical waveguide mode. Energy in the cylindrical waveguide mode is intercepted by slots 17, 18 in the coaxial line 15 and absorbed by material 19. This enables the modes to be separated. Preferably, the output is taken from the axis of the magnetron and the wanted oscillator mode is the  $\pi$ -1 mode.

Fig. 1